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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,289	03/01/2001	Heribert Wutte	PH0-99.528	8148

24737 7590 02/03/2004

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

LAO, TIM P

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 02/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/786,289

Applicant(s)

WUTTE, HERIBERT

Examiner

Tim Lao

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 01 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-10 and 14 is/are rejected.
- 7) ☒ Claim(s) 1-7 and 11-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR § 1.84(o) because there are no descriptive legends for any of the schematic blocks of Fig.1-3, with the exception of the blocks "A/D" and "D/A" of Fig.2 and block "D/A" of Fig.3. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: There are no section headings in the specification (see 37 CFR § 1.77(c)).

Appropriate correction is required.

Claim Objections

3. Claim 1-7 are objected to because of the following informalities:

Claim 1 recites "speech recognition means (42) which are arranged for recognizing text information (RTI) ...". The interpretation of this element of claim 1 in the context of "...recognizing text information..." would be that text information, not voice information (AI), is the input information being evaluated by the speech recognition means (42). However, as best understood from the drawings (Fig.1) and the specification (p.8, L.16-26), the voice information (AI) is the input information being evaluated by the speech recognition means (42) to provide the recognized text

information (RTI) as the output information. The examiner will assume the latter interpretation in determining the validity of claims 1-7. It is suggested that "recognizing text information" be changed to -- recognized text information --.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 7-10, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Mitchell et al. (U.S. Patent 5,799,273).

Claim(s)	Mitchell et al. disclose:
1	<p>A speech recognition device (Fig.2) comprising:</p> <p>receiving means for receiving voice information (audio signal) uttered by a speaker (col.5, L.14-19; col.6, L.9-11) and including speech coefficient storage means (disk storage, Fig.2: 15) for storing a speech coefficient indicator (e.g., scores of alternative words, col.6, L.1-8, L.48-65) and</p> <p><i>{1. Fig.2 illustrates the internal architecture of the computer of Fig.1 (col.5, L.37-38). The audio input device (Fig.2: 16) comprises a microphone (Fig.1: 5) or a pre-recorded signal source (col.6, L.9-11).</i></p> <p><i>2. The score, e.g., the likelihood or probability that the alternative word is the correct word, is a speech coefficient indicator. (col.6, L.59-65)}</i></p> <p>speech recognition means (Fig.2: 11, 12) which are arranged for recognizing text information (text component) which corresponds to the received voice information (input audio signal) by means of an evaluation of the voice information and of the speech coefficient</p>

indicator characterized in that (col.5, L.46-57; col.6, L.48-67; col.7, L.1-30)

{1. The speech recognition output data (i.e., the output of speech recognition engine application, Fig.2: 11) comprises a text component (col.5, L.59-60) and an audio component (col.6, L.55-58). The text component is stored as text files in the user's directory (Fig.2: 15; col.6, L.1-8) and the audio component is stored as audio data files in the temporary directory (Fig.2: 15; col.6, L.30-34).

2. The user model (Fig.2: 21) and language model (Fig.2: 22) are probabilistic in nature and thus comprise probability models and model parameters. During the speech recognition process, the speech recognition engine application (Fig.2: 11) utilizes the language model and the user model along with their associated probability model parameters, and dictionary (Fig.2: 23) to process or evaluate the input audio signal or voice information (col.5, L.52-56). The result of the evaluation is the speech recognition output data which comprise text and audio information, and scores of alternative words in the recognized output (col.5, L.52-62; col.6, L.48-67; col.7, L.1-30).

3. The probability model parameters of the language model and the scores of the alternative words of the speech recognition output data are considered to be speech coefficient indicators.}

transfer means (Fig.11) are provided which enable to import (e.g., download from a floppy disc) a speech coefficient indicator (e.g., new words and updated model parameters) and storing the imported speech coefficient indicator in the speech coefficient storage means (disk storage, Fig.2: 15). (see col.12, L.15-67; col.15, L.4-57; col.16, L.5-8).

{1. Fig. 11 illustrates transfer means of importing and exporting data files between author workstation and editor workstation. The author workstation comprises the architecture of Fig.2 (e.g., with speech recognition engine, user model, and language model; col.12, L.15-28). The editor workstation comprises the architecture of Fig.12 (e.g., without speech recognition engine, user model, and language model; col.12, L.43-67). The purpose of the network connection of Fig.11 is to allow the author workstation to delegate the tasks of correcting mis-recognized words to the editor workstation (col.15, 1-57; col.16, L.5-8).

2. After the corrections by the editor workstation, correction files (e.g., new words and updated model parameters) can be stored on a disc and transferred (imported) back to the author workstation wherein the disc can be re-read by the author workstation for updating of the user model (Fig.2: 21) by the speech recognition engine application (Fig.2: 11). (see col.12, L.36-42).}

<p>Claim(s) 2</p>	<p>Mitchell et al. disclose:</p> <p>A speech recognition device as claimed in claim 1, characterized in that training means (e.g., error correction of misrecognized words and updating user model; col.7, L.31-67; col.8, L.1-24) are arranged for training the stored speech coefficient indicator (e.g., updating the contextual model of the user model with a list of corrected words as well as the number of corrected words; col.8, L.17-23; col.5, L.51-52) by evaluating at least text information (e.g., text component of the speech recognition output data; col.6, L.66-67; col.7, L.1-30) and in that the transfer means enable to export (e.g., copy speech recognition files to a floppy disc; col.12, L.29-36) the speech coefficient indicator stored in the speech coefficient storage means.</p> <p><i>{1. The steps of training means comprise: receiving the speech recognition output data 24 and it's probability information from the speech recognition engine application 11 (col.6, L.48-65); evaluating the recognized output data by the speech recognition interface application 12 (col.6, L.66-67; col.7, L.1-30); and correcting the mis-recognized portion and updating the user model with the corrected words (Fig.5).</i></p> <p><i>2. The score or probability of alternative words associated with the speech recognition output data 24 and the list and number of corrected words for updating the user model 21 are considered to be speech coefficient indicators.</i></p> <p><i>3. The speech recognition run time created files contain score or probability information for the error correction process.}</i></p>
<p>Claim(s) 3</p>	<p>Mitchell et al. disclose:</p> <p>A speech recognition device as claimed in claim 2, characterized in that the training means include correction means (e.g., error correction) for correcting the recognized text information (which comprise misrecognized as well as recognized text information) and for delivering corrected text information and adjusting means for adjusting the stored speech coefficient indicator (e.g., correcting recognition error in the acoustic model and updating the contextual model with the corrected words) by an evaluation of at least the corrected text information. (col.8, L.9-22)</p>
<p>Claim(s) 7</p>	<p>Mitchell et al. disclose:</p> <p>A speech recognition device as claimed in claim 1, characterized in that the transfer</p>

	means can be connected to a computer network. (Fig.11; col.12, L.16-67)
Claim(s) 8	<p>Mitchell et al. disclose:</p> <p>A speech recognition method for recognizing text information which corresponds to voice information, while the method contains the following steps,</p> <p>receiving voice information (audio signal); (col.5, L.14-19; col.6, L.9-11)</p> <p>evaluating the received voice information (input audio signal) and stored speech coefficient indicator (e.g., the probability model parameters of the user model 21 and language model 22, the probability of alternative words, and a list and number corrected words from previous error correction and updating model steps) and delivering recognized text information (i.e., the recognized output data which comprise text and audio information), characterized in that (col.6, L.48-67; col.7; col.8, L.1-23; col.9, L.26-67)</p> <p><i>{1. The list of alternative words also contains corrected words and new words as a result of the error correction and updating the user model steps.}</i></p> <p>a speech coefficient indicator (e.g. correction files which contain the corrected words and probability the corrected words) is imported (i.e., from a floppy disc), and stored (on disk storage 15). (col.12, L.29-42)</p>
Claim(s) 9	<p>Mitchell et al. disclose:</p> <p>A speech recognition method as claimed in claim 8, characterized in that the stored speech coefficient indicator is trained (e.g., error correction of misrecognized words and updating user model; col.7, L.31-67; col.8, L.1-24) by an evaluation of at least one piece of text information (e.g., text component of the speech recognition output data; col.6, L.66-67; col.7, L.1-30) and in that the stored speech coefficient indicator is exported (e.g., copy speech recognition files to a floppy disc; col.12, L.29-36).</p> <p><i>{1. The steps of training means comprise: receiving the speech recognition output data 24 and it's probability information from the speech recognition engine application 11 (col.6, L.48-65); evaluating the recognized output data by the speech recognition interface application 12 (col.6, L.66-67; col.7, L.1-30); and correcting the mis-recognized portion and updating the user model with the corrected words (Fig.5).}</i></p>

	<p>2. <i>The score or probability of alternative words associated with the speech recognition output data 24 and the list and number of corrected words for updating the user model 21 are considered to be speech coefficient indicators.</i></p> <p>3. <i>The speech recognition run time created files contain score or probability information for the error correction process.}</i></p>
Claim(s) 10	<p>Mitchell et al. disclose:</p> <p>A speech recognition method as claimed in claim 9, characterized in that the training of the stored speech coefficient indicator includes both a correction (e.g., error correction) of the recognized text information (which comprise misrecognized as well as recognized text information) and delivering corrected text information and adjusting the stored speech coefficient indicator (e.g., correcting recognition error in the acoustic model and updating the contextual model with the corrected words) by evaluating at least the corrected text information. (col.8, L.9-22)</p>
Claim(s) 14	<p>Mitchell et al. disclose:</p> <p>A speech recognition method as claimed in claim 8, characterized in that a speech coefficient indicator can be imported from a computer network and stored. (Fig.11; col.12, L.16-67)</p>

Allowable Subject Matter

<p>6. Claims 4-6 and 11-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.</p>	
Claim(s) 4, 5	<p>The prior arts fail to show:</p> <p>the training means are arranged for generating a training indicator which denotes the extent of adjustment of the speech coefficient indicator stored in the speech coefficient storage means.</p>

Claim(s) 6	The prior arts fail to show: the imported speech coefficient indicator was trained to a larger extent than the stored speech coefficient indicator.
Claim(s) 11, 12	The prior arts fail to show: a training indicator is generated which denotes the extent of the adjustment of the stored speech coefficient indicator.
Claim(s) 13	The prior arts fail to show: the training indicators shows that the imported speech coefficient indicator was trained to a larger extent than the stored speech coefficient indicator.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent Documents:

[A] 6,064,959 05/2000 Young et al.
[B] 5,390,278 02/1995 Gupta et al.
[C] 5,884,258 03/1999 Rozak et al.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Lao whose telephone number is 703-305-8955. The examiner can normally be reached on M-F, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-305-9508.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9000.

Tim Lao
Examiner
Art Unit 2655

TL
01/23/04


DORIS H. TO 1/25/04
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